

The opinion in support of the decision being entered today  
is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* PAUL A. ZULPA, CHARLES PATRICK CLARKE,  
and THOMAS E. DONOVAN

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Appeal 2007-1401  
Application 09/882,094  
Technology Center 3600

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Decided: August 23, 2007

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Before MURRIEL E. CRAWFORD, LINDA E. HORNER, and  
DAVID B. WALKER, *Administrative Patent Judges*.

HORNER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

The Appellants seek our review under 35 U.S.C. § 134 of the rejection of  
claims 1, 2, 4, 5, 8, and 9. The Appellants canceled claim 10 and withdrew claims

11-20 from consideration. The Examiner withdrew the rejections of claims 3, 6, and 7 (Answer 3). We have jurisdiction under 35 U.S.C. § 6(b) (2002).

## SUMMARY OF DECISION

We REVERSE.

## THE INVENTION

The Appellants' claimed invention is to a method for determining active part numbers and maintaining a current data repository for active part numbers in a manufacturing environment (Specification 1:4-6). Claim 1, reproduced below, is representative of the subject matter on appeal.

1. A method for facilitating database management processes for an enterprise via a communications network, comprising:

extracting part data relating to a part from a data storage device;

retrieving activity data related to said part, said activity data including:

demand data;

purchase data; and

creation data including a date a part number for the part is added to the data storage device;

evaluating said part data and said activity data;

associating a status code with said part data based upon results of said evaluating, the status code assigned

being one of an active status and an inactive status; and  
storing said part data and said status code in said  
data storage location, wherein said facilitating said  
database management processes is accomplished by a  
parts database management software application.

### THE REJECTION

The Examiner relies upon the following as evidence of unpatentability:

Huang	US 6,151,582	Nov. 21, 2000
Liff	US 6,581,798	Jun. 24, 2003
Underwood	US 6,633,878	Oct. 14, 2003

The Appellants seek our review of the rejection of claims 1, 2, 4, 5, 8, and 9 under 35 U.S.C. § 103(a) as unpatentable over Huang, Underwood, and Liff.

### ISSUE

The issue before us is whether the Appellants have shown that the Examiner erred in rejecting claims 1, 2, 4, 5, 8, and 9 as unpatentable over Huang, Underwood, and Liff. In particular, the issue focuses on whether one having ordinary skill in the art at the time of the invention would have had an apparent reason to combine the known elements of Huang, Underwood, and Liff in the manner claimed.

### FINDINGS OF FACT

We find that the following enumerated findings are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427, 7

USPQ2d 1152, 1156 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

1. Huang discloses a system for supporting management decisions associated with manufacturing of service supply chains and allows various decision makers in the supply chain to view the supply chain from their own perspective (Huang, col. 1, ll. 13-18).
2. Huang's system includes a database 12 with a database management system 14, supply chain information systems 15, decision support frames 16, a user interface 18, a model engine 20, and a supply chain frame manager 24 (Huang, col. 4, ll. 51-59).
3. Huang's system interfaces with the supply chain information systems 15 through data exchanges between these systems and the database 12 (Huang, col. 5, ll. 35-37).
4. Huang's system invokes a decision support thread 40 to capture and process a user's decision support request (Huang, col. 5, ll. 53-54).
5. Huang discloses that the database 12 includes structural information and process information (Huang, col. 8, ll. 31-35).
6. The process information is dynamic and relates to demand, production plan, etc. (Huang, col. 8, ll. 34-35).
7. Huang provides a sample of data included in process information in Table 2, which includes a ProductID field (Huang, col. 9, Table 2).
8. As such, Huang discloses a database with a table of process information that includes part data (e.g., ProductID).

9. Further, because Huang discloses that the database 12 exchanges this data with the supply chain information systems 15, Huang's database must extract the data from the database 12 to do so.

10. Huang discloses that its system includes demand management 81, a process involving development and maintenance of medium-term customer forecasts (Huang, col. 12, ll. 51-56).

11. Huang discloses that these forecasts are input into the enterprise's supply management system (Huang, col. 12, ll. 59-60).

12. As such, Huang's forecasts represent demand data, and this data is stored in Huang's system.

13. Huang further discloses that its system includes PSI planning 82, a process to determine a set of feasible sales, production and inventory requirements for capacity and resource planning (Huang, col. 13, ll. 9-11).

14. Huang discloses that at the beginning of each fiscal year, a PSI plan is developed based on forecast and budget plans (Huang, col. 13, ll. 12-14).

15. Huang discloses that the system generates market trend forecasts based on, *inter alia*, available shipment history (Huang, col. 13, ll. 27-29).

16. Shipment history is a form of purchase data. As such, Huang teaches retrieving purchase data for parts.

17. Table 2 of Huang includes a Date Created field.

18. Huang fails to disclose that this date represents the date a part number for a part was added to the database.

19. Huang does not disclose the steps of evaluating said part data and said activity data; associating an active or inactive status code with the part data based upon the results of the evaluating step; and storing the part data and the status code in a data storage location.
20. Underwood describes using business objects to map items between databases (Underwood, col. 19, ll. 36-38).
21. Underwood relates to “software framework designs and more particularly to initializing a database in an issue tracker” (Underwood, col. 1, ll. 6-8).
22. Underwood describes a Codes Table framework design, whose purpose is to maintain application consistency by referencing text phrases through short codes (Underwood, col. 17, ll. 54-58).
23. Underwood explains that the code and text phrase (decode) are stored in a standard table format (Underwood, col. 17, ll. 58-60).
24. As such, Underwood merely teaches a table of shorthand codes that application developers can use to refer to text phrases to maintain application consistency.
25. There is nothing in Underwood that describes these codes as status codes or that discusses that the codes indicate an active or inactive status.
26. Underwood describes Figure 104 as follows:

From the Main Window, select the New button 10332. The New [System Investigation Report] SIR window 10400 maybe displayed which is illustrated in FIG. 104. All SIR requests with status of New (in the Status field 10402) can be reviewed. To look at other

newly submitted SIRs, scroll through the record numbers 10334 (located in the bottom, left-hand corner).

(Underwood, col. 257, ll. 38-43.)

27. Underwood further describes Figure 107 as follows:

From the main window, select the Report button 10336 (FIG. 103.1). This may display the Report Selection Screen 10700, which is illustrated in FIG. 107.

Select the appropriate criteria for the desired reports and select the Preview button 10702. This may provide a view of the report from which it is possible to create printed copies. To return to the main window select the Close button 10704.

(Underwood, col. 258, ll. 17-23.)

28. Underwood does not describe a “not new” status; the only status code shown or described in Underwood is the “new” status code.

29. Underwood contains no teaching that an item coded as “new” will be acted on “actively” and one that is not will be acted on “inactively.”

30. Liff is directed to “an apparatus and method for automated dispensing of packaged pharmaceuticals” (Liff, col. 2, ll. 18-20).

31. Liff describes that its database includes a medication history for each patient, and that the data tracked includes active and inactive medications, including the date the medication was dispensed (Liff, col. 19, ll. 17-20).

32. Liff teaches maintaining a history for each customer of the customer’s of active and inactive patient prescriptions, and does not teach evaluating and indicating whether certain pharmaceuticals in the pharmacy’s database are active or inactive.

33. Prescriptions are not “parts.”

### PRINCIPLES OF LAW

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int’l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1734, 82 USPQ2d 1385, 1391 (2007).

The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966). *See also KSR*, 127 S.Ct. at 1734, 82 USPQ2d at 1391 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”)

The Supreme Court in *KSR* stated that “[o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *Id.* at 1740-41, 82 USPQ2d at 1396. The Court noted that “[t]o facilitate review, this analysis should be made explicit.”



*Id.*, citing *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”). However, “the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.*

## ANALYSIS

The Appellants argue that Huang does not disclose part data and that the DSS support thread 40 relied upon by the Examiner does not teach or suggest extracting part data (Br. 4). The Examiner responds that Huang discloses a second storage area in its database 12 involving part data and that the process of Huang would not function if the support thread 40 was incapable of extracting data (Answer 4-6).

Huang discloses a system for supporting management decisions associated with manufacturing of service supply chains (Finding of Fact 1). Huang’s system interfaces with supply chain information systems 15 through data exchanges between these systems and a database 12 (Findings of Fact 2, 3). Huang’s system invokes a decision support thread 40 to capture and process a user’s decision support request (Finding of Fact 4). Huang discloses that the database 12 includes process information, which is dynamic and includes a ProductID and a Date Created (Findings of Fact 5, 6, 7, 17). As such, Huang discloses a database with a

table of process information that includes part data (e.g., ProductID) (Finding of Fact 8). Further, because Huang discloses that the database 12 exchanges this data with the supply chain information systems 15, Huang's system must extract the data from the database 12 to do so (Finding of Fact 9). As such, we find no error in the Examiner's finding that Huang discloses extracting part data relating to a part from a data storage device as recited in claim 1.

The Appellants further argue that Huang does not disclose activity data including demand data, purchase data, and creation data (Br. 4). The Examiner responds that Huang discloses the existence of demand data (Answer 7, citing Huang, col. 12, ll. 51 et seq.), purchase data as part of the PSI planning process 82 and "feasible sales" (Answer 7, citing Huang, col. 13, ll. 27-28 and 9-10), and creation data (Answer 7-8, citing Huang, col. 36, l. 55 and col. 9, Table 2). The Examiner admits that Huang does not explicitly reference the date the part number for the part was added to the database, but he relies on Liff for this teaching (Answer 8-9). Liff will be discussed and treated *infra*.

Huang discloses that its system includes demand management 81, a process involving development and maintenance of medium-term customer forecasts that are input into the enterprise's supply management system (Findings of Fact 10, 11). We agree with the Examiner that Huang's forecasts represent demand data, as claimed, and that this data is stored in Huang's system (Finding of Fact 12).

Huang further discloses that its system includes PSI planning 82, a process to determine a set of feasible sales, production and inventory requirements for capacity and resource planning (Finding of Fact 13). Huang discloses that a PSI

plan is developed based on forecasts, and that the system generates market trend forecasts based on, *inter alia*, available shipment history (Findings of Fact 14, 15). We find that shipment history is a form of purchase data, and thus Huang teaches retrieving purchase data for parts (Finding of Fact 16).

With regard to creation data, we agree that Table 2 of Huang appears to include a Date Created field (Finding of Fact 17). We also agree with the Examiner (Answer 8) that Huang fails to disclose that this date represents the date a part number for a part was added to the database (Finding of Fact 18).

Huang also does not disclose the steps of evaluating said part data and said activity data; associating an active or inactive status code with the part data based upon the results of the evaluating step; and storing the part data and the status code in a data storage location (Finding of Fact 19). The Examiner relied on Underwood and Liff for these missing teachings (Answer 9-11).

The Appellants contend that Underwood does not teach the assignment of active or inactive status codes as claimed, but rather the codes of Underwood are used for mapping items between databases (Br. 5, citing Underwood, col. 19, l. 24 – col. 20, l. 15). The Examiner contends that Underwood describes using business objects to perform the mapping (Answer 11). We agree with the Examiner that the cited portion of Underwood appears to describe using business objects to map items between databases (Finding of Fact 20). However, we also agree with the Appellants that this portion of Underwood does not teach assignment of active or inactive status codes. Underwood relates to software framework designs and describes a Codes Table framework design, including code and text phrase

(decode) which are stored in a table, and whose purpose is to maintain application consistency by referencing text phrases through short codes (Findings of Fact 21-23). As such, Underwood merely teaches a table of shorthand codes that application developers can use to refer to text phrases to maintain application consistency (Finding of Fact 24). There is nothing in Underwood that describes these codes as status codes or that discusses that the codes indicate an active or inactive status (Finding of Fact 25).

The Examiner provides further evidence of a teaching of status codes in Underwood, citing to the passage in column 257 relating to Figures 104 and 107 (Answer 11). Figure 104 of Underwood depicts a “new” system investigation report window (Finding of Fact 26). Figure 107 of Underwood depicts a report selection screen (Finding of Fact 27).

The Examiner found,

The “new” or “not new” status codes assigned to the items in Underwood may be read, respectively, as active or inactive, because an item coded as “new” will be acted on actively as a new matter, and one that is not, will be inactively acted on as a new matter.

(Answer 11.) We disagree with the Examiner’s reading of Underwood. First, we see nothing in Underwood that describes a “not new” status (Finding of Fact 28). The Examiner is speculating at to its existence. The only status code shown or described in Underwood is the “new” status code (*Id.*). Further, Underwood contains no teaching that an item coded as “new” will be acted on “actively” and one that is not will be acted on “inactively” as asserted by the Examiner (Finding of Fact 29). As such, the combination of Huang and Underwood would not have

led one having ordinary skill in the art to the claimed step of associating an active or inactive status code with part data based upon results of evaluating part data and activity data.

The Examiner further relied on Liff as documentary evidence supporting his taking of official notice that maintaining a status of “active” or “inactive” for database information is well known in the art (Answer 11, citing Liff, col. 19, ll. 18-19). The Appellants contend that even if combined with Huang, Liff fails to cure the deficiencies of Huang (Br. 6). Liff is directed to “an apparatus and method for automated dispensing of packaged pharmaceuticals” (Finding of Fact 30). Liff’s database includes a medication history for each patient, and tracks active and inactive medications, including the date the medication was dispensed (Finding of Fact 31). While we agree that Liff discloses generally that prior art databases have included active and inactive data, we see no apparent reason why one skilled in the art would have used this general teaching to evaluate part data and activity data and then apply an active or inactive status code based on the evaluation. Liff is teaching maintaining a history for each customer of the customer’s active and inactive patient prescriptions, and does not teach evaluating and indicating whether certain pharmaceuticals in the pharmacy’s database are active or inactive (Finding of Fact 32). Further, prescriptions are not “parts” (Finding of Fact 33), and thus Liff’s teaching would not have led one having ordinary skill to evaluate and assign an active or inactive status code to a part.

The Examiner found that the motivation for combining the code assigning feature of “active” vs. “inactive” with the method of Huang is found in Huang’s

ability to service plural supply chains and the need to have a code assigned to parts, particularly with respect to repair parts, to tell anyone involved in the chain the status of the involved part (Answer 11). While it may appear obvious in hindsight to assign an active or inactive status code to parts, we see no reason from the prior art relied upon by the Examiner why one having ordinary skill in the art would have added this feature to the method of Huang absent the Appellants' teaching to do so.

#### CONCLUSIONS OF LAW

We conclude that the Appellants have shown that the Examiner erred in rejecting claims 1, 2, 4, 5, 8, and 9 under 35 U.S.C. § 103(a) as unpatentable over Huang, Underwood, and Liff.

Appeal 2007-1401  
Application 09/882,094

DECISION

The decision of the Examiner to reject claims 1, 2, 4, 5, 8, and 9 is reversed.

REVERSED

jrg/vsh

PHILMORE H. COLBURN II  
CANTOR COLBURN LLP  
55 GRIFFIN ROAD SOUTH  
BLOOMFIELD, CT 06002